

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

IN RE APPLICATION OF: John C. Lynk et al

SERIAL NO: 09/973,558

ART UNIT: 2152

FILED: 09 October 2001

EXAMINER: Kenny Lin

SUBJECT: APPARATUS AND METHOD FOR PREDICTING PHYSICAL  
TOPOLOGIES WITHIN OPTICAL NETWORKS

THE ASSISTANT COMMISSIONER FOR PATENTS  
WASHINGTON, D.C. 20231, U.S.A.

Sir:

This correspondence is in response to the Office Action mailed  
December 20 2006. An Extension of Time is also being filed.

Remarks/Arguments begin on page 2 of this paper.

**Remarks**

The Applicant requests reconsideration of claims 1-10, 13-22 and 25-28 as previously presented.

The Examiner required the Applicant and the Assignee of this application under 37 CFR 1.105 to submit disclosure regarding the use of the JKLM Indexing Scheme to enable the Examiner to identify products and services embodying the disclosed subject matter of JKLM Indexing Scheme and to identify the properties of similar products and services found in the prior art. The JKLM Indexing Scheme was conceived for possible use in Nortel Optical Network Management products but has not been used commercially in such products to date.

In the Office Action, the Examiner rejected Claims 1-10, 13-22 and 25-28 under 35 U.S.C. 112 for claiming subject matter that was not described in the specification. In particular, the Examiner stated:

*Nowhere in the specification disclosed that the processor is operated irrespective of traffic data flow rate to process the received logical connection parameters. The specification is silent regarding whether the operation is processed respective or irrespective to traffic data flow rate. Nowhere in the specification even mention network traffic. The disclosure of processing logical connection parameters in the specification does not exclude the process to be operated without traffic data flow rate. How could one of ordinary skill in the art concludes that the operation is performed irrespective of traffic data flow rate when the specification fails to disclose this?*

In response, the Applicant points out that the processor of the present invention processes logical parameters (CTPs) at any PDH rate such as STS-12c. In particular, the Applicant refers to paragraph 29 of the specification which states:

*In one embodiment, the CTPs for all the logical connection layers, including all PDH rates and concatenated rates such as STS-12c are included in the sorting and the ports are subsequently arranged in order based upon the total number of CTPs associated with the particular ports, starting with the port(s) having the greatest number and ending with the port(s) having the lowest number.*

Applicant further notes that since the present invention is directed to an apparatus and method for predicting physical topologies within optical networks, a person of skill in the art would understand that the expression "traffic data flow rate" in the rejected claims could be construed to include optical data flow rates such as STS-N rates on a PDH network. As such, the Applicant believes that the specification sufficiently discloses a processor that is operated irrespective of traffic data flow rate to process the received logical connection parameters. Thus, withdrawal of this rejection is respectfully requested.

The Examiner rejected claims 1-5, 8, 10-12, 14, 16-21, and 25-27 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,061,505, (Pitchaikani et al) in view of U.S. Patent No. 5,933,416 (Schenkel et al.). The Examiner further rejected claims 6-7, 9, 13, 15, 22, 28 under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,061,505, (Pitchaikani et al) and U.S. Patent No. 5,933,416 (Schenkel et al.), and further in view of "Official Notice". Applicant has considered the Examiner's objections but respectfully disagrees for the reasons set forth below.

Neither Pitchaikani et al. or Schenkel et al., either alone or in combination, teach or suggest a processor that operates at any traffic data flow rate to process the received logical connection parameters in order to predict at least one physical connection between two of the ports within the plurality of nodes based upon the results of the processing. Instead, Pitchaikani defines general descriptors of storing and displaying already available information regarding the logical and physical connections between devices on a network are provided, whereas Schenkel teaches a processor that must operate at a stable traffic monitoring data flow to predict the network topology. In particular, col 3, lines 29 to 32 of Schenkel et al. confirms the stable traffic requirement in Schenkel's invention by stating that "Each device in the network must have some activity whose rate can be measured. The particular activity measured in a device must remain the same for the duration of the sequence of measurements". In Schenkel et al. if a stable rate is not achieved, the topology of the network cannot be predicted. Specifically, Col 3, lines 50-52 states "Should the rates be so low that few intervals record any activity, more measurements may need to be recorded to reach a certain accuracy of topology discovery."

Therefore, Applicant submits that claims 1-5, 8, 10-12, 14, 16-21, and 25-27 are patentable over U.S. Patent No. 6,061,505, (Pitchaikani et al) in view of U.S.

Patent No. 5,933,416 (Schenkel et al.). Applicant also submits that claims 6-7, 9, 13, 15, 22, 28 are also now patentable over U.S. Patent No. 6,061,505, (Pitchaikani et al) and U.S. Patent No. 5,933,416 (Schenkel et al.) and in view of Official Notice. Applicant therefore requests reconsideration of claims 1-10, 13-22 and 25-28 and withdrawal of the rejections under 35 U.S.C. 103(a).


In view of the above remarks, the Applicants request early allowance of the amended application.

Yours very truly,

John C. Lynk  
Yossi Kanzen

CWJ/gap  
Agent/Admin  
c/o NORTEL NETWORKS LIMITED  
Intellectual Property Law Group  
P.O. Box 3511, Station "C"  
Ottawa, Ontario, Canada K1Y 4H7

Phone: (613) 768-3013  
FAX: (613) 768-3017  
Date: May 8<sup>th</sup>, 2007

By   
Patent Agent: Bill Junkin  
Reg. No. 29,496